



Trajectories of intimate partnerships, sexual attitudes, desire and satisfaction

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ABSTRACT

This research addresses the interrelations existing between trajectories of intimate partnerships and attitudes toward sexuality, sexual desire, and sexual satisfaction. It is based on a dataset of 600 adults aged 25–46 living in Geneva (Switzerland) and uses innovative multivariate techniques for clustering life trajectories. The results emphasize the diversity of men's and women's trajectories of intimate partnerships. Trajectories with frequent and short-term partnerships are associated with recreational attitudes and higher solitary and dyadic sexual desire. In contrast, trajectories featuring few or no intimate partnerships are associated with traditional sexual attitudes and less sexual desire. Women's attitudes toward sexuality are more strongly associated with their intimate trajectories than men's. This suggests that men and women do not develop their sexuality in the same relation with intimacy. The results are referred to the gendered master status hypothesis.

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This article addresses the issue of the interrelations existing between trajectories of intimate partnership and attitudes toward sexuality, sexual desire, and sexual satisfaction. Most life course studies have been concerned with sexuality as far as it endangers the life opportunities of individuals, such as, for instance, by taking them out of the loop of educational training in the case of teenage pregnancy or by putting them at risk of sexual diseases (Crockett, Bingham, Chopak, & Vicary, 1996; Dickson, Paul, Herbison, & Silva, 1998; Dunne et al., 1997; Graaf, Vanwesenbeeck, Meijer, Woertman, & Meeus, 2009; Miller & Moore, 1990). Although a large number of studies exist on the timing of the first sexual intercourse or early sexual intercourse in teenage years and its link with attitudes toward sexuality and current sexual behavior (Bozon, 1993; Crockett et al., 1996; Furstenberg, Morgan, Moore, & Peterson, 1987; Kinsman,

Romer, Furstenberg, & Schwarz, 1998; Mueller, Gavin, & Kulkarni, 2008; Upchurch, Levy-Storms, Sucoff, & Aneshensel, 1998), few studies have focused on the interrelations existing between life trajectories and other dimensions of sexuality than the first sexual intercourse. This research refers specifically to individuals' trajectory of partnerships (such as the number of partnerships, their duration, as well as the frequency and the duration of celibacy) and various dimensions of sexuality, such as attitudes toward sexuality, sexual desire, and sexual satisfaction. We address such issues empirically by using a dataset of adults and innovative multivariate techniques for clustering life trajectories. As sexuality is a social behavior entrenched in intimacy, we expect that trajectories of partnerships developed by individuals over time are related with the ways in which they currently experience sexuality.

1. First sexual intercourse as a central life course transition

Studies dealing with sexuality in a life course perspective mainly focus on the first sexual intercourse and sexual

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behavior during teenage years (Bozon, 1993, 1998; Dickson et al., 1998; Sennott & Mollborn, 2011; Upchurch et al., 1998; Whitbeck, Conger, & Kao, 1993). They stress that the age at first sexual intercourse is associated with attitudes toward sexuality. Individuals who have had their first sexual intercourse early are more likely to have permissive attitudes toward sexuality. They also have more frequent sexual activities later on, and they develop a greater diversity of sexual experiences (Bajos & Bozon, 2008; Bozon, 1993, 1998). In contrast, individuals who have their first sexual intercourse at a later age tend to give more importance to relational commitment before initiating sexual intercourse (Bajos & Bozon, 2008; Bozon, 1993, 1998; Moore & Davidson, 2006). This suggests that the timing of the first sexual intercourse has an enduring effect on subsequent sexual behaviors. Therefore, trajectories of partnerships that individuals develop throughout their life may be a key factor for understanding their current sexuality. Individuals' sexuality and attitudes toward sexuality are embedded in a series of social practices, social interactions, and social expectations about intimacy and the meaning of partnerships that may develop throughout the life trajectory (Bajos, Ducot, Spencer, & Spira, 1998; Bozon, 2001a; Carpenter, 2010; Gagnon & Simon, 2005; Meggiolaro, 2010). For these reasons, considering the trajectory of intimate partnership of individuals from adolescence to adulthood may be a fruitful way of examining the link between the construction of intimacy, attitudes toward sexuality, sexual desire, and sexual satisfaction.

2. Intimate trajectories and sexuality

Previous research stressed the importance of attitudes toward sexuality for the understanding of sexual behaviors (DeLamater, 1987; Laumann, Gagnon, Michael, & Michaels, 1994; Lefkowitz, Gillen, Shearer, & Boone, 2004; Reiss, 1964). Indeed, attitudes toward sexuality are constructed in relation with social norms and influenced by individuals' experiences (Carpenter, 2010). To some extent, they reflect the subjective definition of what is acceptable or not in terms of sexual activity as well as the types of conditions under which sex should occur, such as within the institution of marriage, in a context of love and commitment to the sexual partner, or for self-entertainment (Gagnon, 1999, 2004; Laumann et al., 1994). Therefore, all individuals do not have the same social representations or the same norms when it comes to sexuality and are not expected to put the same set of values to it (Carpenter, 2010; Gagnon, 2008; Green, 2008a,b; Levine, 2002). In this perspective, it appears that individuals with more permissive attitudes have more frequent and diverse sexual activities (DeLamater, 1987; Gerressu, Mercer, Graham, Wellings, & Johnson, 2008; Laumann et al., 1994; Weinberg, Lottes, & Gordon, 1997) and greater acceptance toward non-coital intercourses and solitary sex (Carvalho & Leal, 2013). In contrast, individuals with more conservative attitudes develop less frequent sexual activities and a lower diversity of sexual practices (Davidson & Moore, 1994; DeLamater, 1987; Laumann et al., 1994; Lefkowitz et al., 2004; Luquis,

Brelsford, & Rojas-Guyler, 2012; Moore & Davidson, 2006; Udry & Campbell, 1994).

Overall, because all attitudes and individual experiences are intertwined (Bergman, 1998; Bohner & Dickel, 2011; Oskamp & Schultz, 2004; Tesser & Shaffer, 1990), there may be a relation between attitudes toward sexuality and trajectories of intimate relationships. Indeed, the development of sexuality in life trajectories may be interpreted as a "career" (Becker, 1973), in which changes of objective statuses, such as partnerships, and changes of perspectives, motivations, opinions, and even desires concerning sex intermingle. Indeed, individuals tend to adjust their attitudes toward sexuality to their experiences of intimate relationships and vice versa (Carpenter, 2010; Meggiolaro, 2010). Accordingly, we expect individuals with intimate trajectories characterized by a frequent shift of partnerships to have more permissive attitudes toward sexuality compared to individuals with long-lasting partnerships.

In addition to attitudes toward sexuality, sexual desire and sexual satisfaction are also central dimensions of sexuality that should be taken into account when dealing with life course, as they are constitutive of self-identity and self-development in contemporary societies (Bajos & Bozon, 2008; Bozon, 2001a; Gagnon & Simon, 2005; Green, 2008a,b). In this regard, studies make a distinction between dyadic sexual desire, the desire to experience sexual activities with a partner, and solitary sexual desire, the desire to engage in sexual activity alone (Spector, Carey, & Steinberg, 1996; Tremblay, 1999). As research results often point out the fact that attitudes toward sexuality are associated to sexual behavior (Lefkowitz et al., 2004; Luquis et al., 2012; Nikken & Graaf, 2013; Weeden & Sabini, 2007), solitary and dyadic sexual desires might be also related to specific sexual attitudes as well as to trajectories of partnerships. For instance, solitary sexual desire and activities are perceived as positive by some individuals, while for others, they are perceived as negative or even shameful sexual activities (Carvalho & Leal, 2013; Costa, 2012; Davidson & Moore, 1994; Gerressu et al., 2008; Jaspard, 2005; Kaestle & Allen, 2011). Therefore, we expect that individuals who have developed intimate trajectories characterized by numerous partnerships facilitating permissive attitudes toward sexuality have greater solitary and dyadic desires, while those with few partnerships, which supposedly are associated with more conservative attitudes toward sexuality, might have lower solitary and dyadic desires.

As for sexual satisfaction, several studies claim that it is strongly and positively correlated to commitment beliefs and attitudes toward sexuality focused on feelings of love and partnership (Dzara, 2010; Haavio-Mannila & Kontula, 1997; Higgins, Mullinax, Trussell, Davidson, & Moore, 2011; Sprecher, 2002; Yucel & Gassanov, 2010). However, as far as we know, no research has examined the link between trajectories of intimate partnership and current sexual satisfaction. One may expect individuals with few and long-lasting partnerships in their intimate trajectory to be characterized by stronger commitment beliefs, more relational attitudes, and greater sexual satisfaction.

3. Gendered master statuses

Several studies highlight the double standard by which women are socialized to consider sexuality with a partner as an act of commitment and love, while men are pushed to consider sexual activities as a dimension of personal achievement (Bozon, 1993, 2001b; Byers, 1996; Gagnon, 1999, 2008; Greene & Faulkner, 2005). The “traditional heterosexual sexual scripts” (Byers, 1996; Gagnon, 1990; Greene & Faulkner, 2005) define men’s sexuality as focused on self-pleasure without commitment and deep feelings involved and women’s sexuality as centered on the partnership and on their partner’s desire (Bajos et al., 1998; Bajos, Ferrand, & Andro, 2008; Ferrand, Bajos, & Andro, 2008; Gagnon, 1990). Consequently, men are more likely to favor numerous sexual encounters and activities, while women are expected to prioritize the stability of their partnership (McNulty & Fisher, 2008).

Gender differences in attitudes toward sexuality reflect broader social inequalities in the life course of men and women that are characteristic of many national contexts, including Switzerland (Charles, Buchmann, Halebsky, Powers, & Smith, 2001). In the Swiss context, normative injunctions and institutional constraints favor the development of a so-called *gendered master status*, as they dictate women to prioritize their partnership, family relations, and the private sphere, and enforce men to focus on their participation in the public sphere, which mainly implies occupational development and projects (Charles et al., 2001; Levy & Widmer, 2013; Widmer, Kellerhals, & Levy, 2003). Therefore, gendered master statuses may have consequences on how men and women develop their sexuality throughout their *career* of intimacy, and one may expect the trajectories of partnerships of women to be more strongly associated with various dimensions of sexuality than the trajectories of partnerships of men.

4. Summary

This study aims to uncover types of trajectories of intimate relationships of individuals and their interrelations with several dimensions of sexuality as they are currently experienced by those individuals. It first examines the relation of attitudes toward sexuality with trajectories of intimate partnerships. Trajectories featuring frequent and short-term intimate relationships are expected to be associated with more permissive attitudes, whereas those focused on few and long-lasting partnerships are expected to be associated with conservative or relational attitudes toward sexuality. Those interrelations are expected to be stronger for women than for men, as women’s master status in Switzerland is orientated toward intimacy and the family, while men’s master status is oriented toward paid work and occupational achievement. Secondly, because attitudes toward sexuality correlate with a diversity of sexual outcomes, we expect trajectories of partnerships to be associated with sexual desire and sexual satisfaction.

5. Method

5.1. Sample

The data used in this research come from a large interdisciplinary survey about sexuality and sexual desire, funded by the Fonds Maurice Chalmieu (University of Geneva). According to the available resources and in order to ensure the statistical validity of the sample, the final target population was expected to be no fewer than 600 individuals meeting the following three criteria: (1) being aged from 25 to 45 years old (which corresponds to the period of adulthood fecundity), (2) being a native or fluent French speaker (in order to minimize understanding bias) living in the region of Geneva (Switzerland), and (3) being eligible according to pre-defined quotas so that the final sample was composed of 50% men and 50% women with comparable ages. The addresses database of a major local marketing company was used to build up the survey sample. This register provides a reliable coverage of the households located in the area under study. The initial target population was made of 10,000 households randomly selected from the register. A contact letter was first sent to each of the households, in which the subject and the aim of the study were presented. In a second step, households were contacted by phone to assess if they contained individuals meeting the criteria for this study. In sum, 7344 individuals were successfully contacted, 3821 met the defined criteria, and 1121 were out of quotas. Among the 2700 individuals who were contacted and met criteria and quotas, 867 agreed to participate in the study. Finally, 600 individuals (300 men and 300 women) took part effectively. Participants received 20 Swiss francs as compensation for their participation. The data were collected from March until August 2011.

The questionnaire was administered in two steps. The first part, including socio-demographic, life course, and social network questions, was done through face-to-face interviews. The second part was self-administered and concerned issues of partnership (reserved to those involved in a relationship for at least three months), psychological conditions, sexuality, frequency of sexual activities, intensity of sexual desire, attitudes toward sexuality, sexual satisfaction, and sexual practices. The questionnaire required approximately one hour to complete.

Respondents were, on average, 36.2 years old (SD: 5.6). 80% of participants were in a partnership, and 60% had children. Concerning the level of education, 44% of the individuals had a university degree, while 56% had a lower educational level. This large proportion of highly educated individuals meets the general and acknowledged difficulty of studies addressing sex issues to recruit respondents from the lower strata of society (Bajos & Bozon, 2008). Most respondents reported being active in the labor market; 7.5% of the participants were unemployed. More than 40% of participants earn more than 6000 CHF per month. Around 30% of the sample earned between 6000 and 4000 Swiss francs per month, and 30% earned less than 4000 Swiss francs per month. Finally, more than 95% of the sample declared having heterosexual preferences.

5.2. Measures

Participants were asked to name all of the partners with whom they had an intimate relation for a period of at least three months (defined in the questionnaire as: “boy/girlfriend,” date, companion, spouse, etc., without necessarily having had sexual intercourse or having been in love with them) from age 16 onward. They had to indicate the date (month and year) of the beginning and the end of each intimate relationship.

A scale based on 17 items measuring distinctive sexual attitudes was constructed purposely for this study, the reason being that most scales created so far in the North American context have considered marriage as the main indicator of partnership. Indeed, studies often used attitudes toward extra- or premarital sex (DeLamater, 1987; Fisher, Davis, Yarber, & Davis, 2013; Hendrick & Hendrick, 1987; Laumann et al., 1994). Even scales measuring liberal or conservative sexual attitudes consider the relationship between sexual partners as marital (i.e., Hudson, Murphy, & Nurius, 1983). However, in the case of Switzerland, as for other European countries, alternatives to marriage are widespread and question its place as a main indicator of commitment in a relationship. Therefore, several items found in various scales, including the notion of “premarital sexual behavior,” for example, make little sense in the context of the study. Accordingly, an exploratory scale of attitudes toward sexuality considering marriage as a secondary element and focusing more on the importance of commitment between sexual partners, instead, has been created.

The items of this scale were inspired by the measure of “the sexual normative orientation scale” of Laumann et al. (1994) but also by several other scales of attitudes toward sexuality (i.e., Fisher et al., 2013; Hendrick & Hendrick, 1987; Hudson et al., 1983). The items were rated from (1) “It does not characterize me at all,” to (4) “It completely characterizes me.” Three dimensions were found using

principal component analysis: “recreational (-permissive),” which means the tendency to consider sex for fun without necessarily being committed (for example, “Having sexual intercourse with someone I recently met is a stimulating experience”). “Traditional” attitudes refer to the tendency to value marriage as an important prerequisite and religion as a guide for sexuality (for example, “My religious beliefs guide my sexual behavior”). “Communicative (-relational)” attitudes refer to the tendency to give great importance to communication between sexual partners (for example, “It is very important to me to regularly discuss my desires with my sexual partner”). Factor scores are used in the analyses in order to maintain the main variance of the measured dimensions. Details of items, factors scores, and Cronbach's alpha for each dimension are presented in Table 1.

Solitary and dyadic sexual desires were examined independently in this paper. The intensity of sexual desires was estimated with a 13-item validated questionnaire (Spector et al., 1996). This scale measured participants' intensity of solitary sexual desire with four items, such as, “How important is it for you to fulfill your desires to behave sexually by yourself?” The answers went from little to high importance, from (1) “Not at all important,” to (8) “Extremely important.” Level of dyadic sexual desire was measured with nine items, such as, “During the last month, how often have you had sexual thoughts involving a partner?” Answers went from lower to higher frequency, from (1) “Not at all,” to (7) “Many times a day.” Before the survey, the scale was translated from English to French by a bilingual person, then back-translated from French to English by another bilingual person. The two versions were compared, and wording adjustments were made. Cronbach's alphas were calculated with this sample for both dimensions (solitary desire: $\alpha = 0.887$; dyadic desire: $\alpha = 0.809$). The intensity of solitary and dyadic desire was calculated by summing correspondent items.

Table 1

Results of the principal component analysis (varimax rotation) of 17 items measuring attitudes toward sexuality. The regressions scores, eigenvalues, and Cronbach's alpha for each dimension are presented.

Factors	Recreational	Traditional	Communicative
Eigenvalues	4.98	2.73	1.53
Cronbach's alpha	.807	.678	.733
<i>Abbreviate items of attitudes</i>			
Having desire for another person	.695	-.095	-.120
Using pornographic material	.692	.039	.059
Sexual intercourse with someone recently meet	.692	-.245	.067
Sexual activities impossible without love	-.642	.290	-.012
Exploring different sexual experiences	.590	-.209	.210
Must be in love with sexual partner	-.581	.189	-.006
Masturbation healthy behavior	.483	-.408	.079
Fun during sexual intercourse	.388	-.286	.070
Marriage gives new dimension to sexuality	-.101	.695	-.014
Religion as guideline	-.181	.675	.015
Sexuality only between persons committed	-.337	.624	.038
Procreation is an important aim of sexuality	-.041	.580	.040
Early sexual intercourse is regrettable	-.124	.555	-.148
Very important to discuss with partner	.015	.080	.811
Necessary to communicate on desire	.129	.043	.793
Being informed on what partner likes	.195	.003	.769
Discussions about sexuality kills desire	.150	.265	-.565

Sexual satisfaction was measured with the Multidimensional Sexuality Questionnaire (Snell, Fisher, & Walters, 1993). This scale grouped affirmations, such as “I am very satisfied with my sexual life.” Each item was rated on a scale from (1) “Not at all characteristic of me,” to (5) “Very characteristic of me.” Cronbach’s alpha was equal to 0.899 with these variables. The intensity of sexual satisfaction was calculated using the mean of the items.

Previous research demonstrated the importance of some socio-demographic characteristics on sexuality and sexual desire (see, particularly, Tremblay, 1999). Indeed, the intensity of desire and the frequency of sexual activities might decrease with age for both men and women (McKinlay & Feldman, 1994; Tremblay, 1999). Moreover, having children might also affect the intensity of desire and the frequency of sexual activities because for most couples with children, sexuality loses its central place and becomes secondary (Bozon, 2009). The levels of education as well as the type of employment and the income are variables that might generally be associated with different types of attitudes toward sexuality, mainly for women. Indeed, a high level of education is associated with less gendered sexual roles. Women evolving in a less gendered environment have more recreational sexual attitudes than women living in a highly gendered context, which is often related with a lower level of education and less financial autonomy (Bajos et al., 1998; Bozon, 2009; Tremblay, 1999). For these reasons, socio-demographic variables, such as age, relationship status (currently in a relationship versus single), parenthood status (having children or not), and level of education (university degree versus other level), were taken into account.

The three dimensions of attitudes toward sexuality were used first as dependent variables and then as co-independent variables for explaining desires. Solitary and dyadic desires as well as sexual satisfaction were used as dependent variables only. Socio-demographic variables were used as co-independent variables.

5.3. Analytical procedure

First, intimate trajectories were constructed. Each month of the respondent’s life between age 16 and 40 was associated with a specific relational status (“not in a relationship,” “in the first relationship,” “in the second relationship,” and so on). Such trajectories captured the timing, frequency, and duration of relationships and periods of being single. Using recursive dynamic programming, optimal matching analysis (OMA) provided a measure of the dissimilarity that exists between all pairs of individual trajectories. These inter-individual distances were gathered in a squared matrix. A hierarchical cluster analysis (Ward, 1963) was applied to this matrix to group individuals who have similar trajectories to produce a typology of intimate trajectories (Gauthier, 2013).

This typology was described by using bivariate statistical analyses comparing the age at first partnership, the mean number, the duration of the relationships, and the duration of celibacy between each relationship. In a second step, it was used as an independent variable in a set of linear regressions to explain the intensity of sexual desires

(solitary and dyadic) and the level of sexual satisfaction. Two models were considered. The first one examined the association between sexual attitudes and trajectories. The second one tested the relation between intensity of sexual desires (solitary and dyadic) and sexual satisfaction, using variables of sexual attitudes as moderating factors of the effect of trajectories. The analyses were done separately for men and women, as we expected distinct processes according to gender.

6. Results

6.1. Types of intimate trajectories

Five types of intimate trajectories were identified. The *F*-tests in Table 2 indicate, both overall and for men and women separately, the differences between those types concerning the number of partners, the age at the first partnership, the average duration of partnerships, and the periods of celibacy between each partner; overall, and for men and women separately.

The first type (Fig. 1, Barplot type 1) grouped 276 individuals. They had, on average, the largest number of partners (4.3 ± 2.3 partners) and the youngest age at the first partnership (16.6 ± 2.8) (c.f. Table 2). Relations were shorter than in the other types of trajectories (2.6 ± 1.6 years by partners). This type was labeled *Quick shifter*.

The second type (Fig. 1, Barplot type 2) was close to the previous one. It grouped 72 individuals who had begun to date early, on average (17.1 ± 2.8) (Table 2), and had short durations of celibacy between partners (1.5 ± 1.1 years). However, this type grouped individuals who had fewer partners (3.2 ± 0.5) and much longer partnerships (5.3 ± 1.9 years for each partnership) than in the previous type. Therefore, this type was named *Slow shifter*.

The third type (Fig. 1, Barplot type 3) included 159 individuals featuring a long period of celibacy before the first partner, a first short relation, and a second long and stable partnership. Indeed, this type was characterized by an older age at the first partner (21.9 ± 5.3) and a lower number of partners (2.5 ± 1.1) (Table 2). However, the durations of the partnerships were shorter than in the previous type (4.2 ± 3.3 years for each partner), and partnerships alternated with longer periods of celibacy (3.2 ± 3.4 years) between each relation. We described this type as *Late bloomer*.

The fourth type (Fig. 1, Barplot type 4) included 52 individuals. It was characterized by a longer period of celibacy before the first date (21.1 ± 4.2 years old at the first partnership) (Table 2), but individuals stayed, in general, with their first partner (1.1 ± 0.4 number of partners). Therefore, they had the longest duration of relationship with their partners (13.1 ± 6.4 years) and the shortest period of celibacy (1.3 ± 1.2 years between partners). This type was, therefore, named *Stayer*.

Finally, a fifth type grouped 41 individuals who reported not having had any partner for at least three months or sometimes one or two very short ones during adolescence. For this reason, the average age of the first partner was the lowest one (14.2 ± 0.6). This group was, therefore, called *Loner*. Individuals in this group had the lowest duration of partnerships (0.6 ± 0.4 years) and the

Table 2

Mean comparisons of the number of partners, age at the first partnership, duration of the relationships, and duration of celibacy by type of intimate trajectories.

Types of intimate trajectories	Quick shifter		Slow shifter		Late bloomer		Stayer		Loner		Total		F
	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	
Women	N = 135		N = 38		N = 74		N = 31		N = 22		N = 300		
Number of partners	4.7	2.5	3.3	0.6	2.3	0.8	1.6	0.5	0.3	0.5	3.2	2.2	54.0***
Age at first partnership	16.4	2.5	16.4	2.3	20.8	4.9	20.5	4.1	14.1	0.6	17.9	4.0	25.5***
Relationship duration (years)	2.8	1.6	5.1	1.9	5.2	3.6	13.7	7.2	0.6	0.5	4.9	4.6	11.4***
Period of celibacy between partners (years)	1.3	1.2	1.5	1.2	1.8	1.6	1.3	1.2	0.8	0.0	1.5	1.3	5.6***
Men	N = 141		N = 34		N = 85		N = 21		N = 19		N = 300		
Number of partners	3.9	2.1	3.1	0.5	2.6	1.3	1.0	0.0	0.1	0.2	3.0	1.9	34.6***
Age at first partnership	16.9	3.1	17.6	3.1	23.0	5.3	21.7	4.4	14.6	0.0	19.1	4.9	34.8***
Relationship duration (years)	2.4	1.6	5.5	2.0	3.4	2.7	12.2	5.0	0.3	0.0	3.8	3.5	13.1***
Period of celibacy between partners (years)	1.6	1.6	1.4	1.0	2.1	2.1	na	na	na	na	1.8	1.7	5.5***
Total	N = 276		N = 72		N = 159		N = 52		N = 41		N = 600		
Number of partners	4.3	2.3	3.2	0.5	2.5	1.1	1.1	0.4	0.2	0.4	3.1	2.1	84.4***
Age at first partnership	16.6	2.8	17.1	2.8	21.9	5.3	21.1	4.2	14.1	0.6	18.5	4.5	58.9***
Relationship duration (years)	2.6	1.6	5.3	1.9	4.2	3.3	13.1	6.4	0.6	0.4	4.3	4.2	22.6***
Period of celibacy between partners (years)	1.5	1.4	1.5	1.1	2.0	1.9	1.3	1.2	0.8	0.0	1.6	1.5	7.1***

*** Significance: $p < .01$.

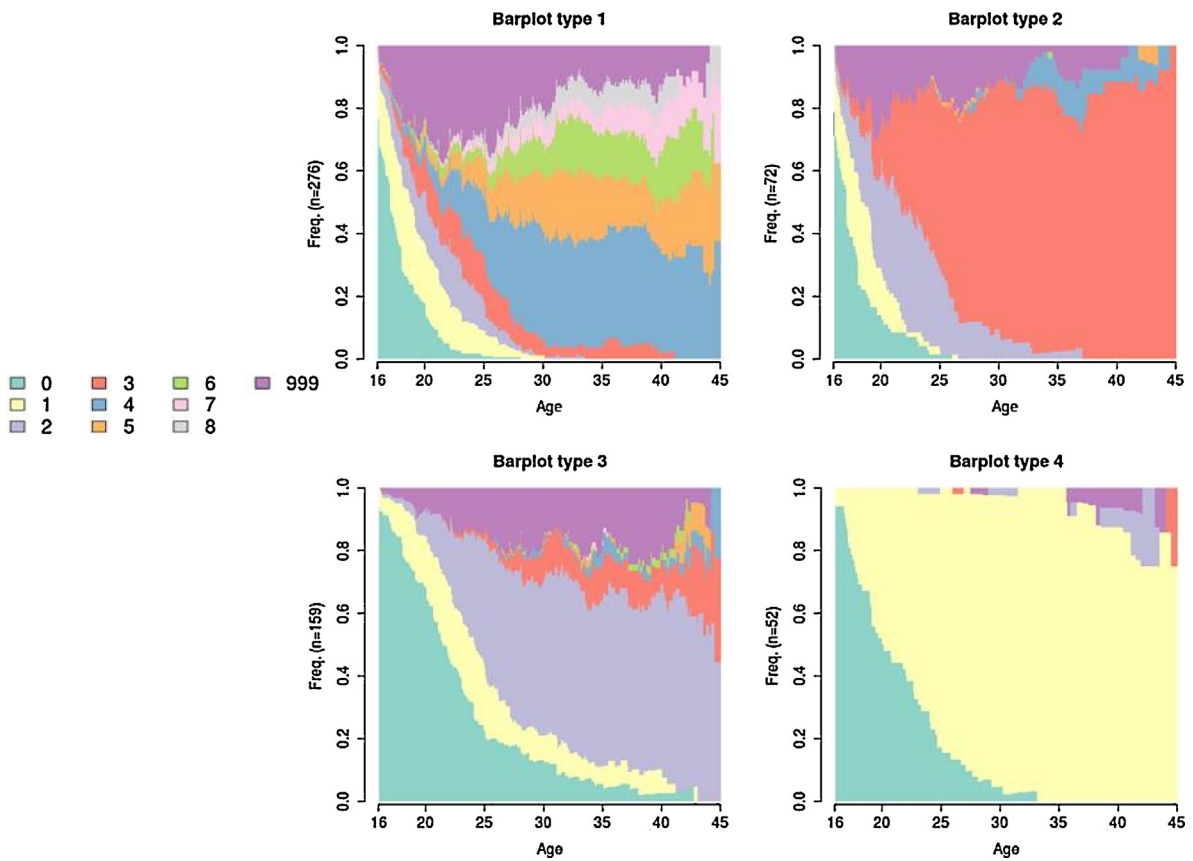


Fig. 1. Types of intimate trajectories (bar plots). Each color represents a state of relationship by the number of partners from age 16 to 45 (0, initial celibacy; 999, post relation celibacy).

lowest period of celibacy between partners (0.8 ± 0.0 years). A graphic of this trajectory cannot be drawn because it would be empty.

A Kruskal–Wallis test estimated the differences in distribution between the five types of trajectories regarding socio-demographic indicators, such as sex, age, relationship, level of education, and parental status. First, no significant differences in distribution of men and women or differences in ages were found (sex: $\text{Chi}^2 = 5.88$; $p = 0.72$, and age: $\text{Chi}^2 = 4.09$, $p = 0.25$). However, the share of those being currently in a relationship, having children, or having a university degree varied significantly from one type of trajectory to the other. Individuals who followed a *Slow shifter* or a *Stayer* trajectory were more likely to be currently involved in a relationship and to have children than those who belonged to the *Loner* or even the *Late bloomer* types (“being in a relationship” versus “being single”: $\text{Chi}^2 = 12.1$; $p = 0.017$; “having children” versus “not”: $\text{Chi}^2 = 19.7$; $p < 0.001$). Regarding the level of education, individuals who have had a *Quick shifter* or a *Late bloomer* trajectory were also more likely to have a university degree ($\text{Chi}^2 = 10.9$; $p < 0.05$).

6.2. Differences of attitudes toward sexuality

Comparing men’s and women’s scores on the three types of attitudes toward sexuality, the results of an F -test

indicate that men and women differed only in recreational attitudes. Men have more recreational attitudes than women (women: mean = -0.43 ± 0.93 ; men: mean = 0.43 ± 0.88 ; $F = 132.7$; $p < 0.001$) but no more traditional attitudes (women: mean = -0.06 ± 1.01 ; men: mean = 0.02 ± 0.99 ; $F = 2.06$; $p = 0.15$) nor less communicative attitudes (women: mean = -0.02 ± 1.7 ; men: mean = 0.06 ± 0.93 ; $F = 0.24$; $p = 0.62$).

The results of linear regressions of sexual attitudes according to the types of trajectories are presented separately for women and for men (Table 3). First of all, trajectories were more strongly associated with women’s attitudes than with men’s. Indeed, recreational attitudes were stronger in the *Quick shifter* type for women. Women’s traditional attitudes were more prominent in the *Loner* type of trajectory and weaker in the *Slow shifter* type. Women’s communicative attitudes were lower in the *Late bloomer* trajectory. Quite distinctly, men’s sexual attitudes were not significantly associated with the types of intimate trajectories (Table 3).

6.3. Differences of sexual desire and sexual satisfaction

The linear regressions of steps 1 in Table 4 show that sexual desire and sexual satisfaction were associated with trajectory types for both men and women. The control by attitudes toward sexuality (steps 2 of Table 4) shows that the

Table 3

Results of the linear regression (unstandardized coefficients) of the three types of attitudes toward sexuality according to the types of trajectories (steps 1), controlled by socio-demographic variables (steps 2), separately for women and men.

Predictors	Recreational attitudes		Traditional attitudes		Communicative attitudes	
	Step 1 β	Step 2 β	Step 1 β	Step 2 β	Step 1 β	Step 2 β
Women (N = 300)						
<i>Intimate trajectories</i>						
Quick shifter	0.29***	0.28***	–0.14	–0.15	–0.12	–0.15
Slow shifter	0.17	0.16	–0.34**	–0.34**	0.04	0.00
Late bloomer	–0.01	–0.02	0.02	0.01	–0.26**	–0.28**
Stayer	–0.27	–0.25	–0.08	–0.07	0.21	0.26
Loner	–0.19	–0.17	0.55***	0.55***	0.14	0.18
<i>Sociodemo. variables</i>						
Age		–0.02		–0.01		–0.04***
In relationship		–0.15		0.05		–0.25
Children		–0.02		–0.05		–0.12
Education (University)		–0.07		–0.01		–0.25**
R squared	0.05	0.06	0.04	0.04	0.02	0.08
ΔR squared		0.02		0.00		0.06
Men (N = 300)						
<i>Intimate trajectories</i>						
Quick shifter	0.12	0.11	–0.06	–0.04	–0.10	–0.09
Slow shifter	0.12	0.14	–0.27	–0.26	–0.11	–0.04
Late bloomer	0.12	0.12	0.06	0.08	–0.02	–0.05
Stayer	–0.03	–0.03	0.16	0.13	0.26	0.22
Loner	–0.32	–0.34	0.10	0.10	–0.04	–0.05
<i>Sociodemo. variables</i>						
Age		–0.02		–0.01		–0.02**
In relationship		–0.15		0.02		0.07
Children		0.10		0.06		–0.20
Education (University)		0.15		–0.13		–0.11
R squared	0.02	0.04	0.01	0.02	0.01	0.04
ΔR squared		0.02		0.01		0.03

** Significance: $p < .05$.

*** Significance: $p < .01$.

link between sexual desire and sexual satisfaction with trajectory types was mostly indirect, with a moderating effect of attitudes toward sexuality. Indeed, regarding women, the positive regression score between the *Quick shifter* type and desire (solitary and dyadic) as well as the negative score of the *Stayer* type (step 1 in Table 4) with solitary desire became non-significant when taking into account sexual attitudes (step 2). In contrast, women's sexual satisfaction was not associated with intimate trajectories.

Concerning men's sexuality, solitary desire was not associated with the types of trajectory (step 1), but it was strongly associated with attitudes toward sexuality (in step 2). Men's dyadic desire was negatively associated with the *Loner* type of trajectory but positively associated with recreational and communicative attitudes and negatively with traditional ones. Finally, the *Stayer* type was linked to sexual satisfaction. The inclusion of socio-demographic variables in steps 3 did not change the associations between intimate trajectories, sexual attitudes, and sexual desire. Only "being currently in a relationship" and communicative attitudes were positively associated with sexual satisfaction for both men and women.

In brief, trajectory types were related to solitary and dyadic sexual desire for men and women. For both men and women, those associations were, for the most part, accounted for by the inclusion of sexual attitudes, as shown by the decreasing statistical significance of trajectories when attitudes were included in the models.

Overall, women's intimate trajectories were more strongly related to sexual attitudes than men's.

7. Discussion

This study emphasizes the diversity of trajectories of intimate partnerships of men and women. It confirms that the unequal pace of development of partnerships throughout the life course is related to distinct attitudes toward sexuality but also to unequal sexual desire. As hypothesized, trajectories with frequent and short-term relationships were associated with recreational attitudes and, thus, higher solitary and dyadic sexual desire. In contrast, trajectories featuring few or no intimate partnerships gave way to traditional sexual attitudes and less sexual desire. Overall, the results confirm that sexuality is embedded in careers of intimacy (Carpenter, 2010; Meggiolaro, 2010).

Results also show that women's attitudes toward sexuality are more strongly associated with their intimate trajectories than men's. However, in regard to sexual satisfaction, it is worth pointing out that women's sexual satisfaction is not associated with trajectories of partnerships. One explanation might be that the quality of partnerships, rather than their number and timing, is what plays out in their case (see, for instance, McNulty & Fisher, 2008). Such quality could obviously not be measured retrospectively and, therefore, was not considered in this study. Overall, the results suggest that men and

Table 4

Unstandardized coefficients of the linear regression of intensity of sexual desires (solitary and dyadic) and sexual satisfaction according to types of trajectories (steps 1) and attitudes toward sexuality (steps 2), controlled by socio-demographic variables (steps 3) separately for women and men.

Predictors	Solitary desire			Dyadic desire			Sexual satisfaction		
	Step 1 β	Step 2 β	Step 3 β	Step 1 β	Step 2 β	Step 3 β	Step 1 β	Step 2 β	Step 3 β
Women (N = 294)									
<i>Intimate trajectories</i>									
Quick shifter	1.68***	0.34	0.18	2.57***	1.57	1.44	−0.58	−0.36	−0.15
Slow shifter	0.29	−0.96	−0.93	0.57	−0.59	−0.50	1.52	1.56	1.48
Late bloomer	0.74	0.90	0.75	−0.70	0.10	−0.03	−1.07	−0.62	−0.48
Stayer	−2.10**	−1.29	−1.16	−0.80	−0.40	−0.26	−1.16	−1.39	−1.34
Loner	−0.62	1.01	1.16	−1.64	−0.69	−0.64	1.29	0.81	0.49
<i>Sexual attitudes</i>									
Recreational		3.81***	3.74***		4.02***	4.00***		0.17	0.28
Traditional		−1.71***	−1.74***		−1.05**	−1.07**		0.30	0.30
Communicative		0.30	0.19		2.81***	2.82***		1.68***	1.84***
<i>Sociodemo. variables</i>									
Age			−0.08			−0.03			0.03
In relationship			−0.59			0.85			3.18***
Children			−0.28			−0.69			−0.16
Education (University)			0.34			0.86			0.22
R squared	0.04	0.46	0.47	0.03	0.26	0.27	0.03	0.13	0.17
ΔR squared		0.42	0.01		0.24	0.01		0.10	0.04
Men (N = 289)									
<i>Intimate trajectories</i>									
Quick shifter	0.15	−0.18	−0.22	0.38	0.04	−0.02	−0.61	−0.36	−0.45
Slow shifter	0.84	0.26	0.30	1.71	1.20	1.13	0.00	0.31	0.04
Late bloomer	0.22	0.07	−0.21	1.42	1.06	1.15	−0.41	−0.31	0.08
Stayer	−0.15	0.24	0.71	0.56	0.32	0.26	2.60***	2.13**	1.37
Loner	−1.06	−0.39	−0.58	−4.06**	−2.63	−2.52	−1.58	−1.77	−1.05
<i>Sexual attitudes</i>									
Recreational		1.80***	1.79***		3.99***	3.94***		−0.39	−0.33
Traditional		−1.18***	−1.13***		−0.99**	−0.98**		0.31	0.26
Communicative		−0.53	−0.51		1.97***	1.99***		1.40***	1.40***
<i>Sociodemo. variables</i>									
Age			0.09			−0.03			−0.09
In relationship			−0.74			−0.13			2.59***
Children			−0.99			0.68			0.79
Education (University)			0.95			0.68			−0.72
R squared	0.01	0.15	0.17	0.02	0.24	0.24	0.03	0.11	0.16
ΔR squared		0.14	0.02		0.22	0.00		0.08	0.06

** Significance: $p < .05$.

*** Significance: $p < .01$.

women do not develop their sexuality in the same relation with their trajectories of partnerships. This gender divide may reflect men's and women's distinct master statuses in a country such as Switzerland. Indeed, the gender socialization in Switzerland pushes a large share of women to find their main source of meaning and identity within the family and the private sphere, while for men, the participation in the labor force has such a function (Levy & Widmer, 2013). In this sense, one may hypothesize that men's attitudes toward sexuality and sexual desire are more related to elements of the life course that take place in the public sphere, such as the comparison to friends and peers, from the beginning of their sexuality onward (Furstenberg et al., 1987; Kinsman et al., 1998; Miller & Moore, 1990; Sennott & Mollborn, 2011).

There are some limitations in this study about the ways in which life trajectories and dimensions of sexuality were operationalized. First, the questionnaire only considered lasting relationships (more than three months) and disregarded casual encounters and possibly extra-conjugal relationships. Some meaningful intimate relationships

might, therefore, have not been considered in this enquiry. In particular, one may think that individuals in the *Loner* type, who reported not having had any partner for at least three months, may have had several occasional sexual partners. This bias might, however, be nuanced because of the strong and positive correlation between the *Loner* trajectory and traditional attitudes for women. It is also possible that a retrospective question on the number of sexual partners throughout the life trajectory would have permitted a complementary assessment on the link associating the accumulation of partnerships and changes of attitudes toward sexuality. However, it is important to note that the numbering of all sexual partners meets memory difficulties for respondents with a large number of occasional sexual encounters. For this reason, the focus on medium- to long-term partnerships used in this paper seems, to us, to be a more reliable empirical approach.

Although this study is exploratory and needs to be replicated in other social and national contexts, its results are noteworthy. Indeed, by showing that various dimensions of sexuality are related to the life trajectories of

individuals, following distinct gendered logics, the study emphasizes the relevance of the life course perspective for the understanding of crucial dimensions of sexuality.

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